

REMARKS

The Office Action dated July 14, 2003, indicated as being "FINAL" has been reviewed in detail and the application has been amended in the sincere effort to place the same in condition for allowance. Reconsideration of the claims of the application and allowance in their amended form are requested based on the following remarks.

Applicants retain the right to pursue broader claims under 35 U.S.C. §120.

Applicants have provided a unique solution with respect to problems regarding ZINC-CONTAINING OPTICAL GLASS MATERIALS. Applicants' solution is now claimed in a manner that satisfies the requirements of 35 U.S.C. §§103 and 112.

Telephonic Interview:

The undersigned would like to sincerely thank Examiner Sample and Examiner Bolden for the courtesies extended during a telephonic interview between the Examiners and the undersigned on September 11, 2003. During the telephonic interview, proposed independent Claims A and B were primarily discussed. At that time distinctions of the present invention as claimed in Claims A and B were pointed

out by the undersigned which distinguished the present invention over the applied prior art.

An agreement was reached between the Examiners and the undersigned that proposed Claims A and B would be allowable over the applied art if the phrase "consisting essentially of" was changed to "consisting of" since none of the applied prior art disclosed glass that consisted of only the components set forth in the proposed claims. Accordingly, proposed Claims A and B, with some minor changes, have been presented herein as new Claims 45 and 54, respectively, and the phrase "consisting essentially of" has been changed to "consisting of." It is believed that Claims 45 and 54 distinguish over the applied prior art and are in condition for allowance.

The telephonic interview is further summarized below in the section entitled "Recordation of the Substance of the Telephonic Interview."

New Issues:

It is submitted that no new issues have been raised by this amendment and that the amendments to the claims have correspondence to limitations in the claims presently on file.

Specifically, new Claims 45-64 only contain limitations already set forth in the claims presently on file.

Allowable Subject Matter:

On page 7 of the outstanding Office Action, the Examiner indicated that Claims 32-35 would be allowable if rewritten in independent form. Claims 32 and 35 have been canceled herein, without prejudice. Claim 33 has been rewritten herein in independent form and is therefore believed to be in condition for allowance. Claim 34 has been amended to depend from Claim 33, and is also believed to be in condition for allowance.

Rejection of Claims 23-31 and 36-44 Under 35 U.S.C. §103:

Claims 23-31 and 36-44 were rejected under 35 U.S.C. §103. Claims 23-32 and 35-44 have been canceled herein, without prejudice, and newly-presented Claims 45-64 will be discussed herein with respect to the applied prior art references.

Rejection of Claims 23-27 Under 35 U.S.C. §103 (Paloschi et al., U.S. Patent No. 6,235,667):

Paloschi, as understood, shows a lead-free glass that has a chemical composition in percent by weight in the ranges set forth in the abstract. Paloschi states that the sum of the following: barium,

lanthanum, niobium, and bismuth, "must be between 7% and 14% by weight" (column 4, lines 47-55). This is also disclosed in Paloschi, column 5, line 30, as follows: "BaO + La₂O₃ + Nb₂O₅ + Bi₂O₃ 7-14."

Claim 45 recites BaO 0 - <0.9% and no lanthanum, niobium, or bismuth. Assuming the barium content is at the maximum allowed by the recited range, and the lanthanum, niobium, and bismuth content is zero, the total content of these four components in Claim 45 cannot exceed 0.9%. Paloschi, however, as discussed above, requires that the minimum total content of these four components be 7%. Claim 45 therefore recites a total content for barium, lanthanum, niobium, and bismuth that falls outside of the range required by Paloschi, and is thus believed to distinguish over and not be anticipated or rendered obvious by Paloschi.

In addition, Claim 56 recites BaO 0 - <0.9%, lanthanum 0 to about 5%, and no niobium or bismuth. Assuming the barium content and lanthanum content are each at the maximum allowed by the recited range, and the niobium and bismuth content is zero, the total content of these four components in Claim 56 cannot exceed 5.9%. Paloschi, however, as discussed above, requires that the minimum total content of these four components be 7%. Claim 56 therefore

recites a total content for barium, lanthanum, niobium, and bismuth that falls outside of the range required by Paloschi, and is thus believed to distinguish over and not be anticipated or rendered obvious by Paloschi.

Claims 46-55 and 57-66 are also believed to be allowable over Paloschi based on their dependence from independent Claims 45 and 56, respectively.

In view of the above, reconsideration and withdrawal of the rejection with respect to the Paloschi reference is respectfully requested.

Rejection of Claims 25, 30, 31, 36, and 40-44 Under 35 U.S.C. §103 (Tachibana et al., U.S. Patent No. 4,472,030):

Tachibana, as understood, shows a cesium-containing optical glass. Specifically, Tachibana discloses that the composition of the optical glass contains a substantial amount of Cs_2O by weight in the range of 6-32%. Tachibana further gives several examples of glass compositions in Table I of the specification. All of the examples contain at the very least 6% by weight of Cs_2O , and most of the examples contain around 10% by weight of Cs_2O .

In contrast to Tachibana, Claim 45 does not recite any Cs_2O .

Claim 45 is therefore believed to distinguish over and not be anticipated or rendered obvious by Tachibana.

Also in contrast to Tachibana, Claim 56 recites Cs_2O in the range of 0 to about 2.5%. Therefore, the maximum Cs_2O content according to Claim 56 is 2.5%. Tachibana, however, as discussed above, requires that the minimum content of Cs_2O be 6%. Claim 56 therefore recites a Cs_2O content that falls outside of the range required by Tachibana, and is thus believed to distinguish over and not be anticipated or rendered obvious by Tachibana.

Claims 46-55 and 57-66 are also believed to be allowable over Tachibana based on their dependence from independent Claims 45 and 56, respectively.

In view of the above, reconsideration and withdrawal of the rejection with respect to the Tachibana reference is respectfully requested.

Rejection of Claims 23-31 and 36-44 Under 35 U.S.C. §103 (Speit, U.S. Patent No. 4,820,326):

Speit, as understood, shows an ultraviolet optical filter glass made from a colored alkali silicate glass. Speit discloses a glass that contains, among other things, SnO_2 0.1-1.65% and $\text{NiO} + \text{CoO}$

0.1-4.4%, in weight percent.

Claim 45 does not recite any SnO_2 , NiO , or CoO . Claim 45 is therefore believed to distinguish over and not be anticipated or rendered obvious by Speit.

Claim 56 does not recite any SnO_2 , NiO , or CoO . Claim 56 is therefore believed to distinguish over and not be anticipated or rendered obvious by Speit.

Claims 46-55 and 57-66 are also believed to be allowable over Speit based on their dependence from independent Claims 45 and 56, respectively.

In view of the above, reconsideration and withdrawal of the rejection with respect to the Speit reference is respectfully requested.

Rejection of Claims 23-31, 36 and 40-44 Under 35 U.S.C. §103
(Ritze, U.S. Patent No. 4,106,946):

Ritze, as understood, shows a glass for use as a steep absorption edge filter glass. Ritze discloses a glass that contains, among other things, TiO_2 in the range of 0.9-9% and a minimum content of 0.5% of the colloidal coloring components CdTe , ZnS , CdS , S , and Se , or any combination thereof.

Claim 45 does not recite any TiO_2 , CdTe , ZnS , CdS , S , or Se .

Claim 45 is therefore believed to distinguish over and not be anticipated or rendered obvious by Ritze.

Claim 56 does not recite any TiO_2 . Claim 56 is therefore believed to distinguish over and not be anticipated or rendered obvious by Ritze.

Claims 46-55 and 57-66 are also believed to be allowable over Ritze based on their dependence from independent Claims 45 and 56, respectively.

In view of the above, reconsideration and withdrawal of the rejection with respect to the Ritze reference is respectfully requested.

Rejection of Claims 23-27 and 29 Under 35 U.S.C. §112, Second Paragraph:

Claims 23-27 and 29 were rejected under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. These claims have been canceled herein, without prejudice. However, the subject matter of these claims has been included in some of the newly-presented claims, and therefore the rejections will be addressed with respect to the new claims.

The Examiner rejected Claims 23, 24, 26, 27, and 29 because

the limitation "Cs₂O up to at most about 2.5" was considered unclear in light of the arguments presented in the Amendment dated April 18, 2003. This limitation has been clearly recited in new Claim 56 as "Cs₂O 0 to about 2.5" to remove any ambiguity. Applicants also respectfully withdraw any comments presented in the Amendment dated April 18, 2003 that would appear to suggest that Cs₂O must be contained in a non-zero quantity.

The Examiner also rejected Claims 25, 27, and 29 because the limitation "up to about 5% by weight of one member of the group and combinations thereof: Rb₂O, La₂O₃, Y₂O₃, and GeO₂" was considered unclear in light of the arguments presented in the Amendment dated April 18, 2003. This limitation has been clearly recited in new Claim 56 as "0 to about 5% by weight of one member of the group and combinations thereof: Rb₂O, La₂O₃, Y₂O₃, and GeO₂" to remove any ambiguity. Applicants also respectfully withdraw any comments presented in the Amendment dated April 18, 2003 that would appear to suggest that Rb₂O, La₂O₃, Y₂O₃, and GeO₂ must be contained in a non-zero quantity.

In view of the above, reconsideration and withdrawal of the present rejection is respectfully requested.

Claim Objections:

Claims 24, 27, and 29 were objected to as containing an unclear range limitation. Specifically, these claims recited the following limitation: "in total one of: up to about 1% by weight of a refining agent and up to about 0.5% by weight of a refining agent." The Examiner stated on page 2 of the outstanding Office Action that this limitation is confusing in view of Claims 40 and 41 because "the Examiner believes that the second range is to further limit the first range."

The new claims presented herein do not contain the above limitation, and thus are believed to conform to the Examiner's requirements. In view of the above, reconsideration and withdrawal of the present objection is respectfully requested.

Recordation of the Substance of the Telephonic Interview:

In order to render this Amendment complete, the following is a recordation of the substance of the telephonic interview conducted with the Examiner on September 11, 2003:

- 1) No exhibits were shown, nor were any demonstrations conducted.
- 2) Primarily, proposed independent Claims A and B were

discussed.

3) Primarily, the prior art discussed were U.S. Patents No. 6,235,667 to Paloschi, No. 4,472,030 to Tachibana, No. 4,820,326 to Speit, and No. 4,106,946 to Ritze.

4) Applicant's representative essentially proposed to present new claims based on proposed independent Claims A and B.

5) Generally, Applicant's representative submitted, inter alia, that the prior art discussed did not teach nor suggest a glass consisting of the compositions set forth in proposed independent Claims A and B.

6) Generally no other pertinent matters were discussed.

7) The general outcome of the interview was an agreement between Examiners Sample and Bolden and the Applicants' representative that proposed independent Claims A and B distinguished over the applied prior art and would receive favorable consideration if presented in an amendment.

Art Made of Record:

The prior art made of record and not applied has been carefully reviewed, and it is submitted that it does not, either taken singly or in any reasonable combination with the other prior art of record,

defeat the patentability of the present invention or render the present invention obvious. Further, Applicants are in agreement with the Examiner that the prior art made of record and not applied does not appear to be material to the patentability of the claims currently pending in this application.

In view of the above, it is respectfully submitted that this application is in condition for allowance, and early action towards that end is respectfully requested.

Summary and Conclusion:

It is submitted that Applicants have provided a new and unique ZINC-CONTAINING OPTICAL GLASS MATERIALS. It is submitted that the claims are fully distinguishable from the prior art. Therefore, it is requested that a Notice of Allowance be issued at an early date.

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Respectfully submitted,

A handwritten signature in black ink, appearing to read "Nils H. Ljungman". The signature is fluid and cursive, with the first name "Nils" and last name "Ljungman" being clearly legible.

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